

F	10B Code Selection Logic	/D1.0/ 011101 0100 100010 1011 balance the running disparity of the encoded bit stream	/D5.0/ 101001 1011 101001 0100 balance the running disparity of the encoded bit stream	/D26.0/ 010110 1011 010110 0100 balance the running disparity of the encoded bit stream	/D15.0/ 010111 0100 10100 1011 balance the running disparity of the encoded bit stream		
	B for t RD+	1011	0100	0100	1011		
Ħ,	10B Code for Current RD+	100010	101001	010110	101000		
,	for RD-	0100	1011	1011	0100		
D	10B Code for Current RD-	011101	101001	010110	010111		
C	10B Code Name	/D1.0/	/D2.0/	/D26.0/	/D15.0/		
	y Bit am ords)	0001	0101				
B	Primary Bi Stream (8B words)	000 00001	000 00101	000 11010	000 01111		
A	Sequence Stream Number (8B word		2	60	4		

FIG. 1 (PRIOR ART)

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G	10B Code Selection Logic	10B Code selected to represent the bit of the additional bit stream	10B Code selected to balance the running disparity of the encoded bit stream	10B Code selected to represent the bit of the additional bit stream	10B Code selected to balance the running disparity of the encoded bit stream		
፲	Additional Bit Stream	0		1	÷		
田	10B Code for Current RD+	100010 1011	101001 1011 101001 0100	010110 1011 010110 0100	101000 1011		
D	10B Code for Current RD-	011101 0100 100010 1011			010111 0100 101000 1011		
C	10B Code Name	/D1.0/	/D2:0/	/D26.0/	/D15.0/		
В	Primary Bit Stream (8B words)	000 00001	000 00101	000 11010 /D26.0/	000 01111 /D15.0/		
A	Sequence Number		2	3	4		

FIG. 7



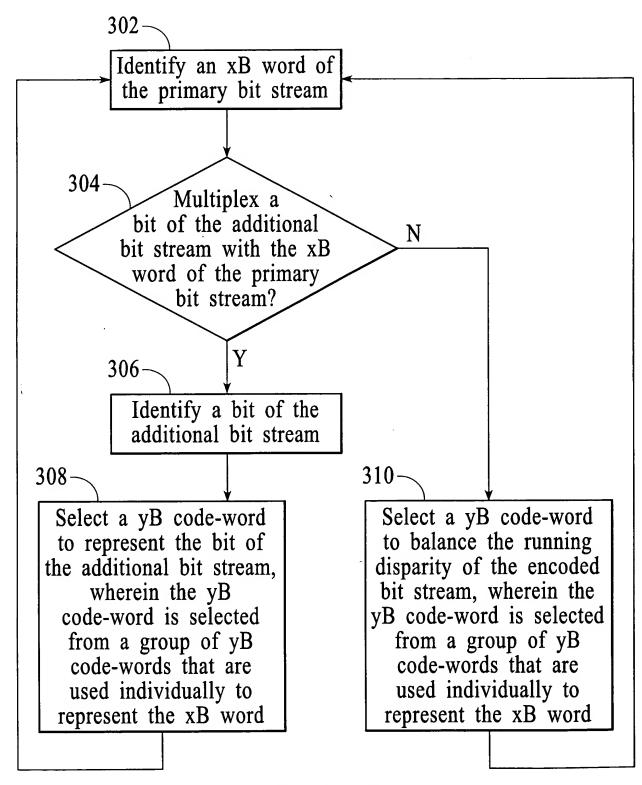
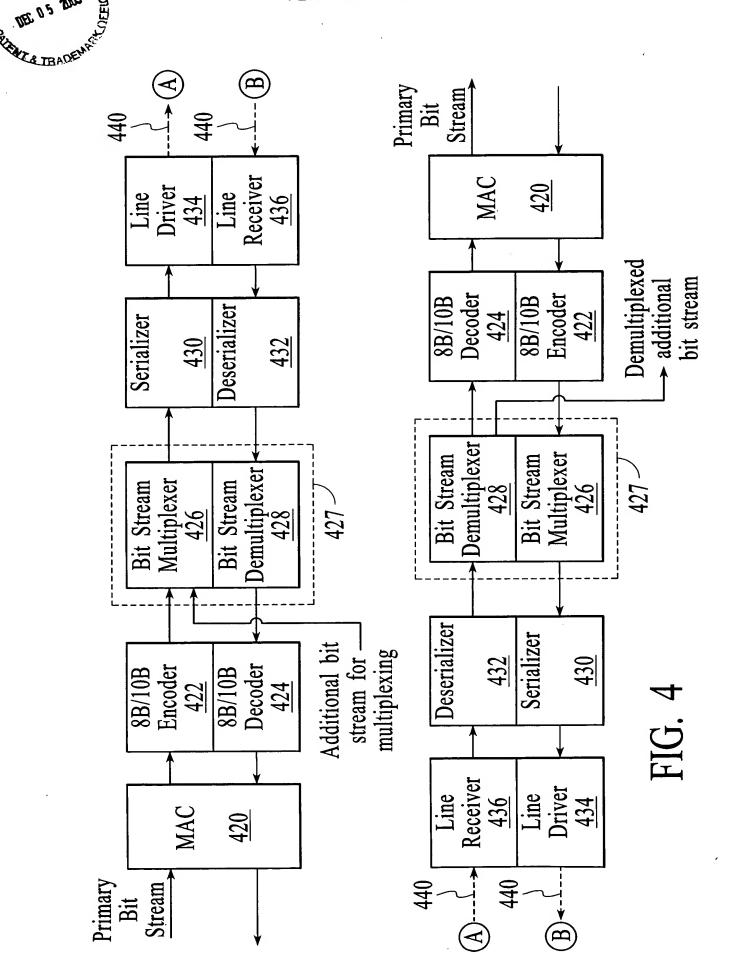
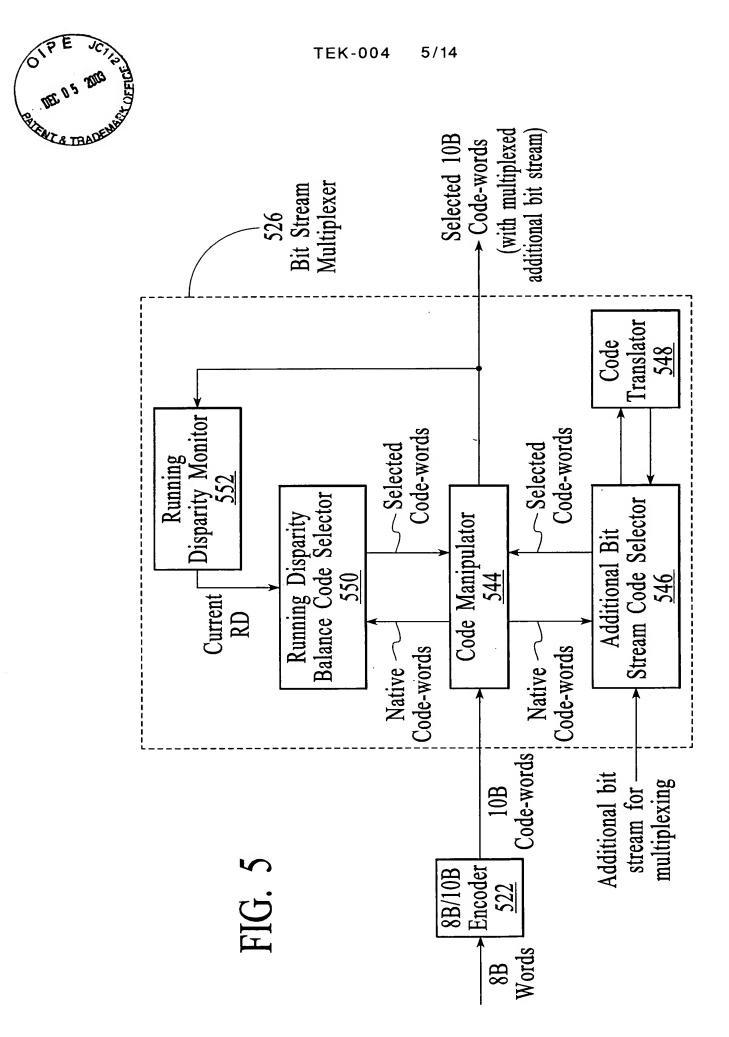


FIG. 3

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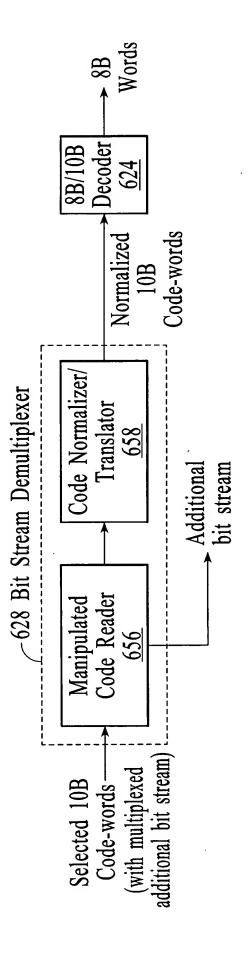


FIG. 6

Z	RD After Code Selection	ı	+	+	+	+	1	ı	+	+	+	+	ı	+
\mathbb{Z}	Selected 10B Code	ı	+	+	1	1	ı	1	+	+	ı	ı	ı	+
Ы	RD Before Code Selection	-	1	+	+	+	+	1	f	+	+	+	+	ı
K	Multiplexed Additional Bit Stream	0		-		0		0		_		0		
-	RD After Code Selection	I	+		ı	I	+	ı	+	ı	I	ı	+	1
Н	Selected 10B Code	+	+	ı	+	+	+	ı	+	ı	+	+	+	ı
Н	RD Before Code Selection	_	1	+	ı	I	ı	+	I	+	1	ı		+
G	New RD	S	[-	<u> </u>	S	S	ഥ	<u> </u>	<u> </u>	<u> </u>	S	S	ഥ	<u> </u>
_	Z Z													
F.	Code for ent RD+ Balance) r Neutral)	100010 1011	101001 0100	010110 0100	101000 1011	010001 1101	010100 1100	101000 1010	001100 0110	010100 1001	100001 1110	000111 1001	101000 1001	011010 0100
	10B Code for 10B Code for Current RD+ (DC Balance) (DC Balance) (+ or Neutral) (- or Neutral)	101 0100 100010		_	010111 0100 101000	101110 0010 010001 1	101011 0011 010100 1	010111 1010 101000	110011 0110 001100	101011 1001 010100	110 0001 100001		010111 1001 101000	011010 1011 011010
	10B Code for Current RD+ (DC Balance) (-or Neutral)	011101 0100 100010	10101 101001	110 1011 010110 (010111 0100 101000	110 0010 010001	101011 0011 010100 1	010111 1010 101000	110011 0110 001100	101011 1001 010100	110 0001 100001	000 1001 000111	010111 1001 101000	010 1011 011010
	10B Code for 10B Code for Current RD+ (DC Balance) (DC Balance) (+ or Neutral) (- or Neutral)	/D1.0/ 011101 0100 100010	/D5.0/ 101001 1011 101001	010110 1011 010110 (/D15.0/ 010111 0100 101000	/D29.4/ 101110 0010 010001 1	/D31.3/ 101011 0011 010100 1	/D15.5/ 010111 1010 101000	/D24.6/ 110011 0110 001100	/D31.1/ 101011 1001 010100	/D30.7/ 011110 0001 100001	/D7.1/ 111000 1001 000111	/D15.1/ 010111 1001 101000	/D22.0/ 011010 1011 011010
	10B Code for 10B Code for Code for Code (DC Balance) (DC	00001 01 /DI.0/ 011101 0100 100010	00101 05 /D5.0/ 101001 1011 101001	/D26.0/ 010110 1011 010110 (01111 0F /D15.0/ 010111 0100 101000	11101 9D /D29.4/ 101110 0010 010001 1	11111 7F /D31.3/ 101011 0011 010100 1	01111 AF /D15.5/ 010111 1010 101000	11000 D8 /D24.6/ 110011 0110 001100	11111 3F /D31.1/ 101011 1001 010100	11110 FE /D30.7/ 011110 0001 100001	00111 27 /D7.1/ 111000 1001 000111	01111 2F /D15.1/ 010111 1001 101000	10110 16 /D22.0/ 011010 1011 011010

FIG. 7

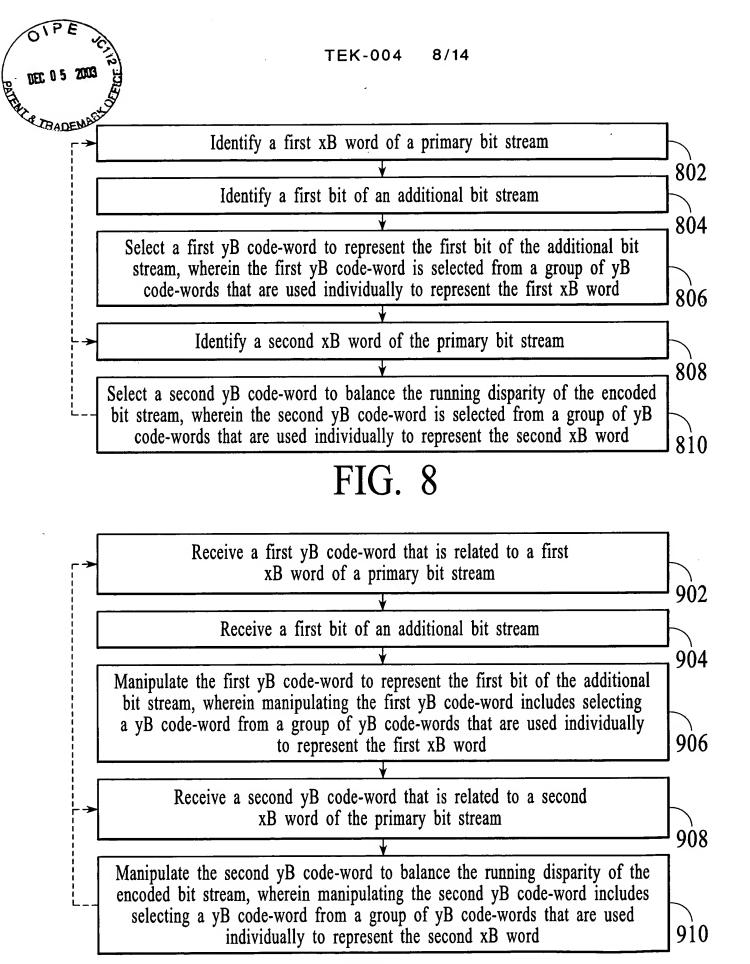


FIG. 9



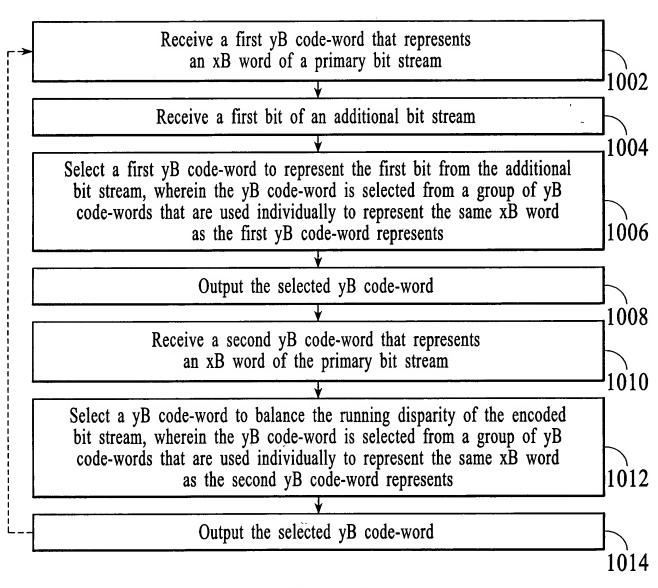
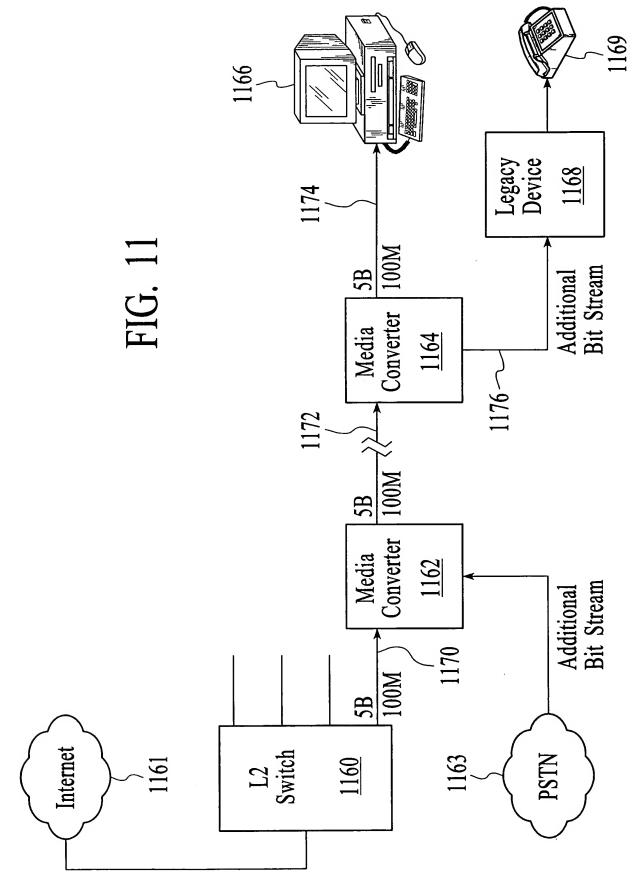
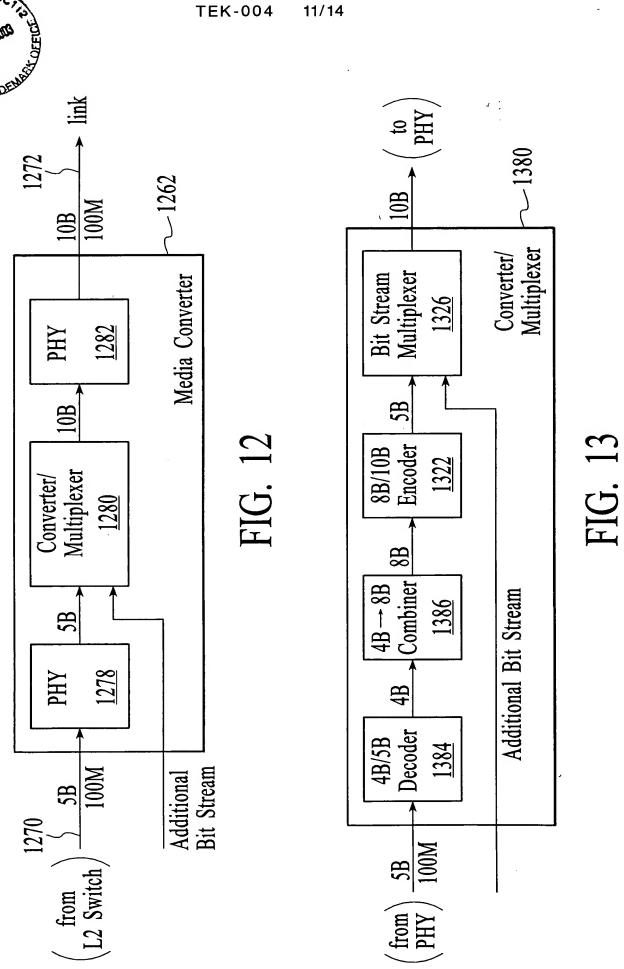
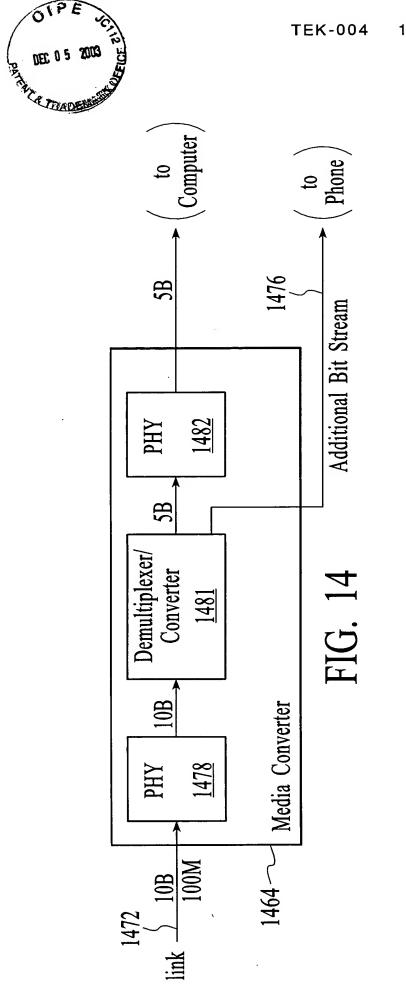


FIG. 10









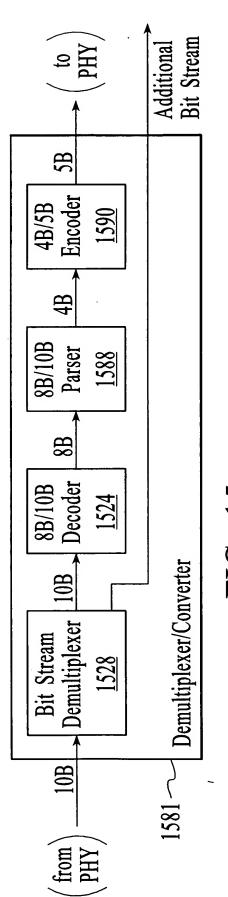


FIG. 15



Convert a q-bit (qB) encoded bit stream into an x-bit/y-bit (xB/yB) encoded bit stream

-1602

Multiplex bits of an additional bit stream from yB code-words of the xB/yB encoded bit stream

FIG. 16

-1604

Receive r-bit (rB) code-words of a primary bit stream, wherein the primary bit stream is encoded into a q-bit/r-bit (qB/rB) encoded bit stream

-1702

Decode the primary bit stream from the rB code-words to q-bit (qB) words

-1704

Identify x-bit (xB) words of the primary bit stream from the qB words

-1706

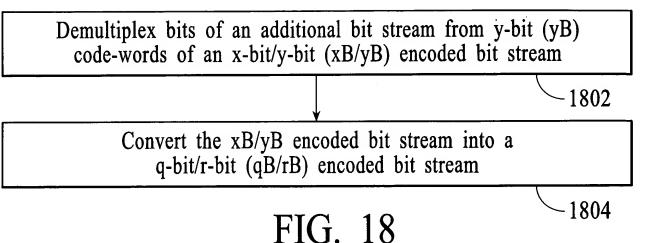
Encode the xB words of the primary bit stream into y-bit (yB) code-words to form an x-bit/y-bit (xB/yB) encoded bit stream

-1708

Multiplex the yB code-words with the additional bit stream to form a multiplexed bit stream

-1710





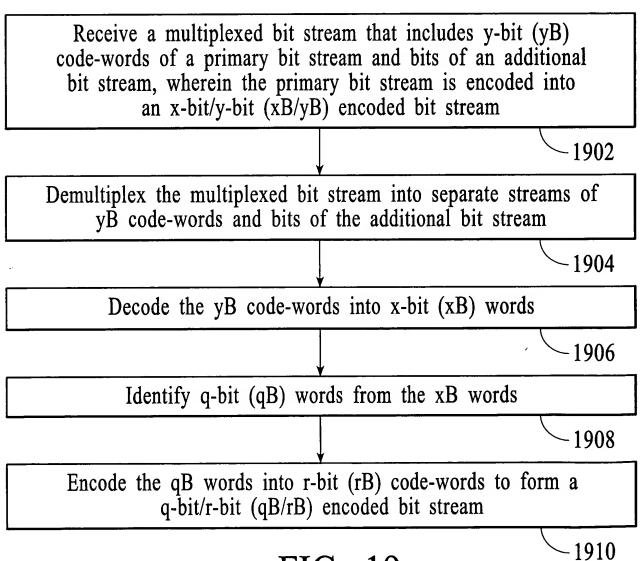


FIG. 19